



# results of DDAST

## **BLASTP 2.2.10 [Oct-19-2004]**

#### Reference:

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1105739873-2607-128700542711.BLASTQ4

Query=

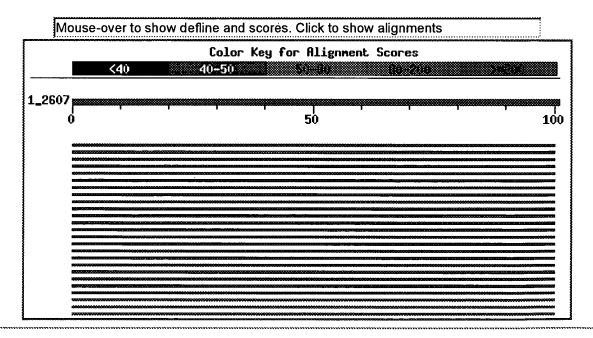
(101 letters)

Database: All non-redundant GenBank CDS translations+PDB+SwissProt+PIR+PRF excluding environmental samples 2,306,668 sequences; 784,723,489 total letters

If you have any problems or questions with the results of this search please refer to the  ${\tt BLAST\ FAQs}$ 

Taxonomy reports

## Distribution of 700 Blast Hits on the Query Sequence



Related Structures

Sequences producing significant alignments:

Score E (bits) Value

<pre>gi 15706263 emb CAC69989.1  bromodomain containing 2 [Homo</pre>	<u>217</u>	6e-56 <b>G</b>
<pre>gi 4826806 ref NP_005095.1  bromodomain containing protein</pre>	217	6e-56 <b>G</b>
<pre>gi 1082363 pir  A56619</pre> female sterile homeotic (fsh) homolo	. 217	6e-56 <b>G</b>
<u>gi 51770504 ref XP 489783.1 </u> similar to MMRING3.1.2 [Mus mu	217	6e-56 <b>G</b>
gii57094404 ref XP 532103.1  PREDICTED: similar to Bromodom	217	6e-56
gi 47059183 ref NP 997660.1  bromodomain-containing 2 [Ratt	217	6e-56 <b>G</b>
<pre>gi 6753910 ref NP 034368.1  bromodomain containing 2 [Mus m gi 55956582 emb CAT11405.1  bromodomain-containing protein</pre>	$\frac{217}{217}$	6e-56 <b>G</b> 6e-56
qi 55725298 emb CAH89514.1  hypothetical protein [Pongo pyg	217	6e-56
<pre>qi;52545923 emb CAH56179.1  hypothetical protein [Homo sapi</pre>	<u>217</u>	6e-56
<u>gi 12802525 gb AAK07919.1 </u> ring 3 [Mus musculus]	<u>217</u>	6e-56 <b>G</b>
<u>gi 1370115 emb CAA65450.1 </u> kinase [Homo sapiens]	217	6e-56 <b>G</b>
<u>gi 2995269 emb CAA15818.1 </u> MMRING3.1.1 [Mus musculus]	217	6e-56 <b>G</b>
<u>gi 2780779 dbj BAA24379.1 </u> Ring3 [Mus musculus] >gi 2780777	<u>217</u>	6e-56 <b>G</b>
<u>qi 2780775 dbj BAA24377.1 </u> Ring3 [Mus musculus]	217	6e-56 <b>G</b>
<u>qi 39645317 gb AAH63840.1 </u> BRD2 protein [Homo sapiens]	217	6e-56 <b>G</b>
<u>gi 1588281 prf  2208296A</u> RING3 protein gi 1370092 emb CAA65449.1  kinase [Gallus gallus]	$\frac{217}{213}$	6e-56 1e-54
gi 3129967 emb CAA18965.1  RING3 kinase [synthetic construc	213	1e-54
gi[34392374 dbj BAC82511.1] Serine threonine Kinase [Coturn	213	1e-54
<pre>gi   54311476   gb   AAH84758.1   Brd2-A-prov protein [Xenopus lae</pre>	202	2e-51 <b>G</b>
<pre>gi 27696271 gb AAH43784.1  Brd2-A-prov protein [Xenopus lae</pre>	<u> 202</u>	2e-51 <b>G</b>
<u>gi 50756877 ref XP_415337.1 </u> PREDICTED: similar to RING3 ki	196	1e-49 <b>G</b>
<pre>gi 8575733 qb AAF78072.1  bromodomain-containing FSH-like p</pre>	<u>195</u>	2e-49 <b>G</b>
gi: 11067749 ref NP_031397.1  bromodomain containing protein	195	2e-49 <b>G</b>
<u>gi 34853148 ref XP_342397.1 </u> similar to Brd3 protein [Rattu	195	2e-49 <b>G</b>
<pre>qi 21594670 qb AAH32124.1  BRD3 protein [Homo sapiens] &gt;qi </pre>	<u>195</u>	2e-49 <b>G</b>
<u>qi;31981064 ref NP_075825.2 </u> bromodomain containing 3 [Mus	195	2e-49 <b>G</b>
<u>gi 40788944 dbj BAA05393.2 </u> KIAA0043 [Homo sapiens]	<u>195</u>	2e-49 <b>G</b>
gi 26345416 dbj BAC36359.1  unnamed protein product [Mus mu	<u> 195</u>	2e-49 <b>G</b>
gi 47115837 sp Q8K2F0 BRD3_MOUSE Bromodomain-containing pro	<u>195</u>	2e-49 <b>G</b>
gi 26332152 dbj BAC29806.1  unnamed protein product [Mus mu	<u> 195</u>	2e-49 <b>G</b>
<pre>gi   50757295   ref   XP   425330.1   PREDICTED: similar to bromodom</pre>	193	9e-49 <b>G</b>
<u>qi 47086635 ref NP 997867.1 </u> Unknown (protein for MGC:77289	191	6e-48 <b>G</b>
gi: 33416361 qb: AAH55533.1  Zgc:77289 protein [Danio rerio] gi: 33417197 qb: AAH55508.1  Unknown (protein for IMAGE:38191	$\frac{191}{189}$	6e-48 <b>G</b> 2e-47
gi 33416865 qb AAH55543.1  Unknown (protein for IMAGE:59138	188	3e-47
<pre>gi[19171509 emb CAC84085.1  hypothetical protein [Takifugu</pre>	187	7e-47
<pre>qi 47216871 emb CAG11678.1  unnamed protein product [Tetrao qi 47212213 emb CAF94980.1  unnamed protein product [Tetrao</pre>	$\frac{186}{184}$	2e-46 4e-46
qi 7657218 ref NP 055114.1  bromodomain-containing protein	182	2e-45 <b>G</b>
qi 33879612 gb AAH30158.1  BRD4 protein [Homo sapiens]	182	2e-45 G
gi 34862361 ref XP 343176.1  similar to bromodomain-contain	182	2e-45 <b>G</b>
gi[37674287]ref[NP 932762.1] bromodomain containing 4 isofo	182	2e-45 <b>G</b>
gi 31560788 ref NP 065254.2  bromodomain containing 4 isofo	182	2e-45 <b>G</b>
gi 19718731 ref NP 490597.1  bromodomain-containing protein	182	2e-45 <b>G</b>
qi 52350614 gb AAH82782.1  Unknown (protein for IMAGE:53893	182	2e-45
qi 27804346 gb AA022237.1  BRD4-NUT fusion oncoprotein [Hom	182	2e-45
<u>qi 3184498 qb AAC27978.1 </u> R31546_1 [Homo sapiens]	182	2e-45 <b>G</b>

gi 45501005 qb AAH67129.1  Unknown (protein for IMAGE:61387	182	2e-45
<pre>gi 50400639 sp Q9ESU6 BRD4 MCUSE</pre> Bromodomain-containing pro	<u>182</u>	2e-45 <b>G</b>
qi 18157527 dbj BAB83842.1  BRD2~partially supported by GEN	<u>182</u>	2e-45
<u>qi 49118460 gb AAH73443.1 </u> LOC443648 protein [Xenopus laevis]	180	8e-45 <b>G</b>
<u>gi 45554416 ref NP 996370.1 </u> CG2252-PC, isoform C [Drosophi	<u> 180</u>	1e-44 <b>G</b>
<u>gi 24640482 ref NP_511078.2 </u> CG2252-PB, isoform B [Drosophi	180	1e-44 <b>G</b>
<pre>gi 24210305 emb CAD54663.1  bromodomain containing 2 [Danio gi 280611 pir  A43742 female sterile homeotic protein, 205K</pre>	$\frac{180}{180}$	le-44 <b>G</b> le-44
<u>qi 31206311 ref XP_312107.1 </u> ENSANGP00000016848 [Anopheles	179	1e-44 <b>G</b>
qi 55241967 gb EAA07774.2  ENSANGP00000016848 [Anopheles ga	179 170	1e-44 2e-44
<pre>qi 47210026 emb CAF90901.1  unnamed protein product [Tetrao qi 47209011 emb CAF91369.1  unnamed protein product [Tetrao</pre>	179 179	2e-44 2e-44
gi 57092013 ref XP 537803.1  PREDICTED: similar to Bromodom	177	9e-44
gi 49899749 qb AAH76786.1  Brd4-prov protein [Xenopus laevis]	176	1e-43 <b>G</b>
<u>qi 48134425 ref XP 393347.1 </u> similar to ENSANGP00000016848	<u>176</u>	1e-43 <b>G</b>
qi 28278510 gb AAH45866.1  Similar to bromodomain containin	<u>176</u>	2e-43
<pre>qi 10441758 gb AAG17179.1  RING3 [Myxine glutinosa] qi 20302741 gb AAM18869.1  unknown [Branchiostoma floridae]</pre>	$\frac{174}{171}$	4e-43 5e-42
gi 38014413 gb AAH60452.1  LOC398944 protein [Xenopus laevis]	167	9e-41 <b>G</b>
gi 55587546 ref XP 524767.1  PREDICTED: similar to testis-s	$\frac{167}{166}$	1e-40
gi 28839607 qb AAH47900.1  BRDT protein [Homo sapiens]	166	2e-40 <b>G</b>
gi 33355659 gb AAQ16198.1  testis-specific BRDT protein [Ho	166	2e-40 <b>G</b>
gi 2554915 gb AAB87862.1  BRDT [Homo sapiens]	1.66	2e-40 <b>G</b>
qi 46399200 ref NP 997072.1  testis-specific bromodomain pr	166	2e-40 <b>G</b>
qi 57088245 ref XP 537079.1  PREDICTED: similar to testis-s	163	1e-39
<pre>gi 38541875 qb AAH62700.1  BRDT protein [Homo sapiens]</pre>	<u> 162</u>	2e-39 <b>G</b>
gi:16905089 ref NP_473395.1  bromodomain, testis-specific [	161	4e-39 <b>G</b>
gi 34875962 ref XP 223146.2  similar to bromodomain-contain gi 50927337 gb AAH78999.1  Unknown (protein for MGC:93906)	160 160	7e-39 <b>G</b> 7e-39
<pre>qi 50751326 ref XP_422346.1  PREDICTED: similar to bromodom qi 47208417 emb CAF92198.1  unnamed protein product [Tetrao</pre>	160 160	7e-39 <b>G</b> 1e-38
qi 52545711 emb CAH56208.1  hypothetical protein [Homo sapi	130	7e-30 <b>G</b>
qi 55648495 ref XP 512452.1  PREDICTED: similar to bromodom	128	5e-29
gi 57101824 ref XP 541985.1  PREDICTED: similar to abhydrol	127	8e-29
<pre>gi 47210344 emb CAF96012.1  unnamed protein product [Tetrao gi 1256804 gb AAB18943.1  RING3 protein [Xenopus laevis]</pre>	$\frac{124}{121}$	5e-28 4e-27
gi:25152243[ref]NP 509770.2] bromodomain containing (XL193)	121 110	1e-23 <b>G</b>
<pre>qi 7504519 pir  T22845 hypothetical protein F57C7.la - Caen</pre>	110	1e-23
<u>qi 2654068 gb AAB87684.1 </u> RING3 [Danio rerio] <u>gi 39582126 emb CAE60803.1 </u> Hypothetical protein CBG04495 [	$\frac{107}{107}$	7e-23 <b>G</b> 1e-22
<u>gi 24649433 ref NP 651190.1 </u> CG13597-PA [Drosophila melanog <u>gi 19528091 qb AAL90160.1 </u> AT24535p [Drosophila melanogaster]	104 104	7e-22 <b>G</b> 7e-22
<u>qi[17568247 ref[NP_509771.1]</u> bromodomain protein (XL193) [C	<u>103</u>	1e-21 <b>G</b>
gi[32564850 ref[NP_871879.1] bromodomain containing protein	<u>101</u>	5e-21 <b>G</b>
gi 17510957 ref NP 491384.1  bromodomain containing protein	101	5e-21 <b>G</b>
<u>gi 39598215 emb CAE68907.1 </u> Hypothetical protein CBG14881 [	98	7e-20
gi 55632563 ref XP 520343.1  PREDICTED: similar to bromodom	91	1e-17
gi 28573564 ref NP_611401.2  CG7229-PA [Drosophila melanoga	86	3e-16 <b>G</b>
gi 16604681 qb AAL24133.1  putative kinase [Arabidopsis tha gi 19528087 qb AAL90158.1  AT24439p [Drosophila melanogaster]	<u>86</u> 86	3e-16 <b>G</b> 3e-16
gi 7573452 emb CAB87766.1  kinase-like protein [Arabidopsis	86	3e-16

gi 9294219 dbj BAB02121.1  unnamed protein product [Arabido	85	6e-16
<pre>gi 15232127 ref NP 189362.1  DNA-binding bromodomain-contai</pre>	<u>85</u>	6e-16 <b>G</b>
<u>qi 4581512 emb CAE40169.1 </u> SPCC1450.02 [Schizosaccharomyces qi 46438562 qb EAK97891.1  hypothetical protein CaO19.8593	84	8e-16 1e-15
<pre>qi 46438562 gb EAK97891.1  hypothetical protein CaO19.8593 qi 47201045 emb CAF89147.1  unnamed protein product [Tetrao</pre>	<u>84</u> 84	1e-15 1e-15
gi 27803868 gb AA022056.1  IMB1 [Arabidopsis thaliana] >gi	83	2e-15 <b>G</b>
gi 3033386 gb AAC12830.1  putative RING3 protein [Arabidops	83	2e-15
gi 42571057 ref NP 973602.1  DNA-binding bromodomain-contai gi 20259928 qb AAM13311.1  unknown protein [Arabidopsis tha	<u>83</u> 83	2e-15 <b>G</b> 2e-15
gi 56236042 gb AAV84477.1  Atlg73150 [Arabidopsis thaliana]	82	4e-15 <b>G</b>
gi 50253452 gb AAT71928.1  At5g63330 [Arabidopsis thaliana]	81	7e-15 <b>G</b>
gi 50940753 ref XP 479904.1  putative bromodomain-containin	80	2e-14 <b>G</b>
gi 19114532 ref NP 593620.1  protein with 2 bromodomains, p	80	2e-14 <b>G</b>
<pre>gi 17551634 ref NP 508124.1  kinase (40.9 kD) (XB213) [Caen gi 57282320 emb CAD43286.1  bromodomain-containing RNA-bind</pre>	<u>79</u> 79	3e-14 <b>G</b> 3e-14
gi 49652967 emb CAG85306.1  unnamed protein product [Debary	79	3e-14 <b>G</b>
qi 7671448 emb CAB89388.1  bromodomain protein-like [Arabid	79	3e-14 <b>G</b>
gi 19173489 ref NP 597292.1  GENERAL TRANSCRIPTION FACTOR [	<u> 79</u>	3e-14 <b>G</b>
gi 39592569 emb CAE63646.1  Hypothetical protein CBG08144 [	<u>79</u>	3e-14
gi 13186138 emb CAC33451.1  PSTVd RNA-biding protein, Virp1	79	4e-14 6e-14 <b>G</b>
<pre>gi 34874095 ref XP_221050.2  similar to fetal Alzheimer ant gi 54635558 gb EAL24961.1  GA15830-PA [Drosophila pseudoobs</pre>	<u>78</u> 78	6e-14 <b>2</b> 6e-14
qi 57282318 emb CAD43285.1  bromodomain-containing RNA-bind	78	6e-14
<pre>qi 57090969 ref XP_537586.1  PREDICTED: similar to fetal Al</pre>	78	7e-14
<pre>gi 30046988 gb AAH50566.1  FALZ protein [Homo sapiens]</pre>	<u>78</u>	7e-14 <b>G</b>
gi 31322942 gb AAP22284.1  bromodomain PHD finger transcrip	<u>78</u>	7e-14 <b>G</b>
<pre>gi 30793995 qb AAP40447.1  unknown protein [Arabidopsis tha gi 55645849 ref XP_511643.1  PREDICTED: hypothetical protei</pre>	<u>78</u> 78	7e-14 <b>G</b> 7e-14
gi 38788274 ref NP 872579.2  fetal Alzheimer antigen isofor	<u>78</u>	7e-14 <b>G</b>
<pre>gi 38788260 ref NP 004450.3  fetal Alzheimer antigen isofor gi 8978291 dbj BAA98182.1  unnamed protein product [Arabido</pre>	<u>78</u> 78	7e-14 <b>G</b> 7e-14
gi 45595651 gb AAH67234.1  FALZ protein [Homo sapiens]	78	7e-14 <b>G</b>
gi 7428977 pir  S71788 P/CAF protein - human	78	7e-14
gi 6683492 dbi BAA89208.1  bromodomain PHD finger transcrip	78	7e-14 <b>G</b>
gi 38174486 qb AAH60715.1  Falz protein [Mus musculus]	<u>77</u>	1e-13 <b>G</b>
<pre>gi 18204482 qb AAH21489.1  Falz protein [Mus musculus]</pre>	<u>77</u>	1e-13 <b>G</b>
<u>qi 31216247 ref XP 316196.1 </u> ENSANGP00000005931 [Anopheles	<u>77</u>	1e-13 <b>G</b>
<pre>gi 6016737 gb AAF01563.1  hypothetical protein [Arabidopsis gi 57282316 emb CAD43284.1  bromodomain-containing RNA-bind</pre>	<u>77</u>	1e-13 1e-13
gi 51766499 ref XP 126724.5  fetal Alzheimer antigen [Mus m	77	1e-13 <b>G</b>
gi 22136456 gb AAM91306.1  unknown protein [Arabidopsis tha	77	1e-13 <b>G</b>
qi 24654644 ref NP 728507.1  CG32346-PA, isoform A [Drosoph	_ <del>77</del>	1e-13 <b>G</b>
<pre>qi 24654638 ref NP 728505.1  CG32346-PB, isoform B [Drosoph qi 57282322 emb CAD43287.1  bromodomain-containing RNA-bind</pre>	<u>77</u>	1e-13 <b>G</b> 1e-13
gi 28516430 ref XP 284106.1  similar to PCAF acetyltransfer	77	1e-13 <b>G</b>
gii16265798 qb AAL16644.1  nucleosome remodeling factor lar	77	1e-13
<u>qi 48104118 ref XP 395718.1 </u> similar to fetal Alzheimer ant	77	1e-13 <b>G</b>
gi 11359006 pir  T42517 bromodomain protein - fission yeast	77	1e-13´
qi 25406905 pir  A86198 hypothetical protein [imported] - A	<del>77</del>	1e-13 <b>G</b>
<u>qi 40805843 ref NP_003875.3 </u> p300/CBP-associated factor [Ho	<u>_77</u>	2e-13 <b>G</b>

<u>gi 57103576 ref XP_534249.1 </u> PREDICTED: similar to p300/CBP	_77	2e-13
<u>gi 55619933 ref XP_516321.1 </u> PREDICTED: similar to p300/CBP	<del>77</del>	2e-13
<u>qi 50937581 ref XP 478318.1 </u> putative RING3 protein [Oryza	<u>_77</u>	2e-13 <b>G</b>
<pre>gi 23297757 gb AAN13019.1  unknown protein [Arabidopsis tha</pre>	<u>77</u>	2e-13 <b>G</b>
gi 50733046 ref XP 426001.1  PREDICTED: similar to PCAF [Ga	<u> 77</u>	2e-13 <b>G</b>
gi 27574121 pdb 1N72 A Chain A, Structure And Ligand Of A H gi 25511645 pir  H86312 F2H15.2 protein - Arabidopsis thali	<u>77</u>	2e-13 2e-13
<u>qi 14317910 dbj BAB59138.1 </u> PCAF [Gallus gallus]	77	2e-13 <b>G</b>
<pre>qi 34874275 ref XP_217321.2  similar to PCAF acetyltransfer</pre>	76	2e-13 <b>G</b>
<u>qi;31209509 ref XP_313721.1 </u> ENSANGP0000003808 [Anopheles	76	2e-13 <b>G</b>
gi 34903950 ref NP 913322.1  putative PSTVd RNA-biding prot	<u> 76</u>	2e-13 <b>G</b>
gi 49650060 emb CAG79786.1 unnamed protein product [Yarrowgi 47221861 emb CAF98873.1 unnamed protein product [Tetraogi 15810439 qb AAL07107.1 unknown protein [Arabidopsis thagi 57282314 emb CAD43283.1 bromodomain-containing RNA-bind	76 76 76 76	2e-13 G 2e-13 3e-13 3e-13
<pre>gi 50757845 ref XP_415674.1  PREDICTED: similar to fetal Al</pre>	76	3e-13 <b>G</b>
<pre>qi 435855 gb AAB28651.1  CREB-binding protein; CBP [Mus sp qi 737920 prf  1923401A protein CBP gi 47223942 emb CAG06119.1  unnamed protein product [Tetrao</pre>	75 75 75	4e-13 G 4e-13 5e-13
gi 38099205 qb EAA46582.1  hypothetical protein MG08925.4 [	75	<sub>6e-13</sub> G
gi 50345997 ref NP 001420.2  E1A binding protein p300 [Homo	74	8e-13 <b>G</b>
gi 3024341 sp Q09472 P300 HUMAN E1A-associated protein p300	74	8e-13 <b>G</b>
<pre>gi 6320132 ref NP_010213.1  Protein involved in transcripti</pre>	74	8e-13 <b>G</b>
gi 31753089 gb AAH53889.1  EP300 protein [Homo sapiens]	74	8e-13 <b>G</b>
gii57092731 ref XP 531721.1  PREDICTED: similar to E1A-asso	74	8e-13
<u>gi 56118232 ref NP 808489.3 </u> E1A binding protein p300 [Mus <u>gi 55661272 ref XP 515155.1 </u> PREDICTED: E1A binding protein	74	8e-13 8e-13
<u>gi 48094965 ref XP 394317.1 </u> similar to ENSANGP00000004748	<u>74</u>	8e-13 <b>G</b>
<pre>qi 4321116 gb AAC51331.2  CREB-binding protein [Homo sapiens]</pre>	74	1e-12 <b>G</b>
<pre>gi 6321691 ref NP_011768.1  Histone acetyltransferase, acet</pre>	74	1e-12 <b>G</b>
<pre>gi 38505359 qb AAR23149.1  CREB-binding protein [Rattus nor gi 57088067 ref XP_536991.1  PREDICTED: similar to CREB-bin</pre>	74	le-12 <b>G</b> le-12
<u>gi 4758056 ref NP 004371.1 </u> CREB binding protein [Homo sapi <u>gi 55249595 gb AAH86282.1 </u> Unknown (protein for MGC:83709)	<u>74</u> 74	1e-12 <b>G</b> 1e-12
qi 51769561 ref XP 148699.4  CREB binding protein [Mus musc	74	1e-12 <b>G</b>
<pre>qi 51769419 ref XP 489497.1  similar to CREB-binding protei qi 51013881 gb AAT93234.1  YGR252W [Saccharomyces cerevisiae]</pre>	74	1e-12 <b>G</b> 1e-12
gi   50728690   ref   XP   416238.1   PREDICTED: similar to E1A-asso	74	1e-12 <b>G</b>
gi   19547887   qb   AAL87532.1  CREB-binding protein [Mus muscul	$\frac{-74}{74}$	1e-12 <b>G</b>
gi 49117594 qb AAH72594.1  Unknown (protein for IMAGE:64084	74	1e-12
qi 21307831 gb AAL54859.1  CREB-binding protein [Aplysia ca	74	1e-12
<pre>qi 1502355 emb CAA67614.1  GCN5 [Saccharomyces cerevisiae] qi 47217876 emb CAG02369.1  unnamed protein product [Tetrao</pre>	$\frac{74}{74}$	1e-12 1e-12
gi:631119;pir: S39162 transcription coactivator CREB-bindin	74 74 74 74	1e-12
<pre>gi 23200188 pdb 1JSP B</pre> Chain B, Nmr Structure Of Cbp Bromod	74	1e-12
gill1513447 pdb 1E61 A Chain A, Bromodomain From Gcn5 Compl	74	1e-12
$\frac{\text{gi}[24659254]\text{ref}[\text{NP}]726307.1]}{\text{gi}[46227211]\text{gb}[\text{EAK68161.1}]}  \text{CG30417-PA}  \text{[Drosophila melanog}$	<u>74</u> <u>74</u>	1e-12 <b>G</b> 1e-12
<u>qi 50755982 ref XP 414964.1 </u> PREDICTED: similar to CREB-bin <u>qi 54656653 gb EAL35582.1 </u> hypothetical protein Chro.50328	<u>74</u> <u>74</u>	1e-12 <b>G</b> 1e-12

gi 5468533 gb AAC50890.2  p300/CBP-associated factor [Homo	74	1e-12 <b>G</b>
<u>qi 44983942 gb AAS52978.1 </u> AER297Cp [Ashbya gossypii ATCC 1	<u>73</u>	2e-12 <b>G</b>
<u>qi 52345413 ref NP_064389.2 </u> p300/CBP-associated factor [Mu	73	2e-12 <b>G</b>
gi 49649342 emb CAG79052.1  YlGCN5 [Yarrowia lipolytica CLI	73	2e-12 <b>G</b>
gi 50287799 ref XP 446329.1  unnamed protein product [Candi	73	2e-12 <b>G</b>
gi 7862148 gb AAF70498.1  PCAF acetyltransferase; p300/CBP	73	2e-12 <b>G</b>
<u>qi 44983653 qb AAS52752.1 </u> AER068Cp [Ashbya gossypii ATCC 1	73	2e-12 <b>G</b>
<pre>gi 8885596 dbj BAA97526.1  unnamed protein product [Arabido</pre>	73	2e-12
<pre>gi 26451383 dbj BAC42791.1  unknown protein [Arabidopsis th gi 54641233 gb EAL29983.1  GA16840-PA [Drosophila pseudoobs</pre>	<u>73</u> <u>72</u>	2e-12 <b>G</b> 3e-12
gi 50303459 ref XP 451671.1  unnamed protein product [Kluyv gi 47229415 emb CAF99403.1  unnamed protein product [Tetrao	<u>72</u> 72	3e-12 <b>G</b> 4e-12
<u>qi 40744729 qb EAA63885.1 </u> hypothetical protein AN1984.2 [A	72	5e-12 <b>G</b>
<u>gi 311664 emb CAA79377.1 </u> BDF1 [Saccharomyces cerevisiae] gi 608567 gb AAA89115.1  Bdf1p	$\frac{-71}{71}$	7e-12 7e-12
<pre>qi 608567 gb AAA89115.1  Bdflp qi 6323431 ref NP 013503.1  Protein involved in transcripti</pre>	$\frac{-7.1}{71}$	7e-12 7e-12 <b>G</b>
qi 31204369 ref XP 311133.1  ENSANGP0000004748 [Anopheles	<u>/-</u> 71	7e-12 <b>G</b>
gi 24663348 ref NP 648586.2  CG4107-PA [Drosophila melanoga	71	7e-12 <b>G</b>
gi 54642162 qb EAL30911.1  GA17962-PA [Drosophila pseudoobs	71	7e-12
gi 55243803 qb EAA06516.3  ENSANGP00000004748 [Anopheles ga	$\frac{71}{21}$	7e-12
gi 55243802 gb EAL41310.1  ENSANGP00000025904 [Anopheles ga	71	7e-12
<u>qi 45383496 ref NP 989660.1 </u> GCN5 general control of amino	<u>71.</u>	7e-12 <b>G</b> 7e-12 <b>G</b>
<pre>gi 50285717 ref XP 445287.1  unnamed protein product [Candi gi 3211728 gb AAC39102.1  GCN5; HAT [Drosophila melanogaster]</pre>	$\frac{-71}{-71}$	7e-12
<u>gi 38099365 qb EAA46722.1 </u> hypothetical protein MG09943.4 [ <u>gi 39590738 emb CAE65110.1 </u> Hypothetical protein CBG09974 [	$\frac{71}{71}$	7e-12 <b>G</b> 7e-12
gi 47208228 emb CAF96470.1  unnamed protein product [Tetrao	<u>71</u> 70	1e-12
gi 54642704 gb EAL31449.1  GA13644-PA [Drosophila pseudoobs	70	2e-11
<pre>gi 19115719 ref NP 594807.1  putative yeast transcriptional</pre>	70	2e-11 <b>G</b>
<pre>qi:17533491 ref NP 496998.1  bromodomain PHD finger transcr</pre>	70	2e-11 <b>G</b>
gi 17533489 ref NP 496997.1  bromodomain PHD finger transcr	<u>70</u>	2e-11 <b>G</b>
gi 17533487 ref NP 496996.1  bromodomain PHD finger transcr	70	2e-11 <b>G</b>
<u>gi 24640865 ref NP_524642.2 </u> CG15319-PB [Drosophila melanog	70	2e-11 <b>G</b>
qi 31432077 qb AAP53762.1  contains similarity to histone a	70	2e-11 <b>G</b>
<pre>qi[54110963 emb CAH60782.1  Hypothetical protein F26H11.2g qi[50507802 emb CAH04722.1  Hypothetical protein F26H11.2c</pre>	<u>70</u> 70	2e-11 2e-11
<pre>qi 34364498 emb CAB54234.3  Hypothetical protein F26H11.2d</pre>	70	2e-11
<pre>gi 7499972 pir  T21435</pre> hypothetical protein F26H11.3c - Cae	<u>70</u>	2e-11
<pre>gi 26350027 dbj BAC38653.1  unnamed protein product [Mus mu gi 29569106 qb AA084020.1  global transcription factor grou</pre>	<u>69</u>	3e-11 <b>G</b> 3e-11
<pre>gi 50302579 ref XP_451225.1  unnamed protein product [Kluyv</pre>	69	3e-11 <b>G</b>
qi 12321252 qb AAG50696.1  hypothetical protein [Arabidopsi	<u>69</u>	3e-11 <b>G</b>
<pre>qi 7511830 pir  T13828 CREB-binding protein homolog - fruit qi 32400806 qb AAP80635.1  histone acetyltransferase [Triti</pre>	69 68	4e-11 6e-11
gi 31711984 gb AAP68348.1  At3g54610 [Arabidopsis thaliana]	68	6e-11 <b>G</b>
<pre>gi!7258364 emb CAB77581.1  histon acetyltransferase HAT1 [A gi!47226142 emb CAG04516.1  unnamed protein product [Tetrao</pre>	<u>68</u> : 68	6e-11 6e-11
gi 47218844 emb CAG02829.1  unnamed protein product [Tetrao	68	6e-11
gi 46433121 qb EAK92574.1  likely histone acetyltransferase	68	8e-11
<u>qi 54638697 qb EAL28099.1 </u> GA15159-PA [Drosophila pseudoobs <u>qi 56468960 qb EAL46759.1 </u> bromodomain protein, putative [E	<u>68</u> 68	8e-11 8e-11
production of the state of the	<u></u>	<b></b>

gi 55297001 dbi BAD68476.1  DNA-binding bromodomain-contain	68	8e-11
<u>qi 24651761 ref NP 536734.2 </u> CG1966-PA [Drosophila melanoga	<u>67</u>	1e-10 <b>G</b>
<pre>qi 57223236 gb AAW44693.1  conserved hypothetical protein [</pre>	<u>67</u>	1e-10
<u>qi 31224454 ref XP_317442.1 </u> ENSANGP00000011787 [Anopheles <u>gi 50256825 qb EAL19543.1 </u> hypothetical protein CNBG1720 [C	<u>67</u> 67	1e-10 <b>G</b> 1e-10
gi 55237658 gb EAA12387.2  ENSANGP00000011787 [Anopheles ga	67	le-10
gi 16768864 gb AAL28651.1  LD09043p [Drosophila melanogaster]	67	1e-10
<pre>gi 6856566 qb AAF29981.1  histone acetyltransferase GCN5 [T gi 5031520 qb AAD38202.1  histone acetyltransferase GCN5 [T</pre>	<u>67</u> 67	1e-10 1e-10
gi 5059246 gh AAD38952.1  ATP-dependent chromatin assembly	67	1e-10
qi[38105685]gb[EAA52082.1] hypothetical protein MG03677.4 [	_67	1e-10 <b>G</b>
qi 7635502 emb CAB88669.1  chromatin accessibility complex	67	1e-10
<u>qi  13183793  gb  AAK15343.1 </u> CECR2 protein [Homo sapiens] >gi	67	1e-10 <b>G</b>
<u>gi 17552708 ref NP 499161.1 </u> CBP/p300 homolog (cbp-1) [Caen	<u>67</u>	le-10 <b>G</b>
<u>gi 17552710 ref NP 499160.1 </u> CBP/p300 homolog (cbp-1) [Caen	67	1e-10 <b>G</b>
<pre>qi 52545926 emb CAH56122.1  hypothetical protein [Homo sapi qi 2133462 pix  S60123 hypothetical protein R10E11.1 - Caen</pre>	67 67	1e-10 <b>G</b> 1e-10
<u>qi 12698025 dbi EAB21831.1 </u> KIAA1740 protein [Homo sapiens]	67	1e-10 <b>G</b>
<pre>qi 33242492 gb AAQ00945.1  general control nonrepressed 5 [ qi 57106607 ref XP 534935.1  PREDICTED: similar to Cat eye</pre>	<u>67</u> <u>67</u>	2e-10 2e-10
gi 50910201 ref XP 466589.1  putative global transcription	67	2e-10 <b>G</b>
gi 51979260 ref XP 507492.1  PREDICTED OJ1791 B03.42-1 gene	67	2e-10 <b>G</b>
gi 13699186 dbj RAB41205.1  kinase-like protein [Oryza sativa]	67	2e-10
<pre>gi 17017400 gb AAL33654.1  histone acetyl transferase [Zea</pre>	<u>66</u>	2e-10
<u>qi 50729022 ref XP_416392.1 </u> PREDICTED: similar to KIAA1740	66	2e-10 <b>G</b>
<u>qi 50728910 ref XP 416340.1 </u> PREDICTED: similar to Transcri	66	2e-10 <b>G</b>
gi 48105414 ref XP 393011.1  similar to CG32394-PA [Apis me	<u>66</u>	2e-10 <b>G</b> 4e-10 <b>G</b>
gi 40740639 gb EAA59829.1  conserved hypothetical protein [	<u>65</u>	4e-10 G
<u>qi 51717063 ref XP 204234.3 </u> cat eye syndrome chromosome re <u>qi 51714476 ref XP 489839.1 </u> similar to Cat eye syndrome cr	<u>65</u>	4e-10 <b>G</b>
	<u>65</u>	4e-10 G
	<u>65</u> 65	5e-10 <b>G</b>
<pre>gi 17534715 ref NP 494767.1  bromodomain adjacent zinc fing gi 49658230 emb CAG91071.1  unnamed protein product [Debary</pre>		5e-10 <b>G</b>
gi 47230592 emb CAF99785.1  unnamed protein product [Debaty	<u>65</u> 65	5e-10 <b>5e-10</b>
gi 2267585 gb AAB63585.1  transcription intermediary factor	65	5e-10 <b>G</b>
qi 998813 gb AAB34289.1  TIF1 [Mus sp.]	65	6e-10 <b>G</b>
<pre>gi   42546847   gb   EAA69690.1   conserved hypothetical protein [</pre>	65	6e-10 <b>G</b>
<pre>gi 34391523 gb AAN61105.1 </pre> putative chromatin remodelling f	<u>65</u>	6e-10 <b>G</b>
gi:32417982 ref XP_329469.1  hypothetical protein [Neurospo	65	6e-10 <b>G</b>
<pre>gi 34328067 ref NP 659542.1  tripartite motif protein 24 [M gi 56473058 gb EAL50506.1  bromodomain protein, putative [E</pre>	65 65	6e-10 <b>G</b> 6e-10
<u>qi 38110007 gb EAA55792.1 </u> hypothetical protein MG01443.4 [	65	6e-10 <b>G</b>
<u>gi 19343832 gb AAH25482.1 </u> Trim24 protein [Mus musculus]	65	6e-10 <b>G</b>
gi 51094800 qb EAL24046.1  transcriptional intermediary fac	64	8e-10 <b>G</b>
gi 51094801 qb EAL24047.1  transcriptional intermediary fac	64	8e-10 <b>G</b>
<pre>gi   55629844   ref   KP   519502.1   PREDICTED: transcriptional int gi   47211977   emb   CAF95299.1   unnamed protein product [Tetrao</pre>	<u>64</u> 64	8e-10 8e-10
qi 32420965 ref XP 330926.1  hypothetical protein [Neurospo	64	1e-09 <b>G</b>
qi 25058961 gb AAH39907.1  GCN5 general control of amino-ac	64	1e-09 <b>G</b>

<u>qi 34873737 ref XP 239340.2 </u> similar to GCN5 general contro <u>qi 57091497 ref XP 548094.1 </u> PREDICTED: similar to GCN5 gen	<u>64</u> 64	1e-09 <b>G</b> 1e-09
<u>qi:31204491 ref: XP 311194.1 </u> ENSANGP0000001532 [Anopheles	64	1e-09 <b>G</b>
qi 55645415 ref XP 511500.1  PREDICTED: similar to GCN5 gen	64	1e-09 <b>G</b>
qi 10835101 ref NP 066564.1  GCN5 general control of amino	64	1e-09 <b>G</b>
gi:39795334 qb AAH63752.1  General control of amino acid sy	64	<sub>1e-09</sub> <b>G</b>
gi 37811671 gb AAR03834.1  general control of amino-acid sy	64	1e-09
qi 1911495 gb AAB50690.1  hGCN5=transcriptional adaptor [hu	64	1e-09
<u>qi: 13278322 qb: AAH03983.1 </u> Gcn512 protein [Mus musculus]	64	1e-09 <b>G</b>
qi 12084461 pdb 1F68 A Chain A, Nmr Solution Structure Of T	64	1e-09
<pre>qi 46228118 qb EAK89017.1  GCN5 like acetylase + bromodomai qi 54658191 qb EAL36865.1  histone acetyltransferase [Crypt</pre>	<u>63</u> 63	2e-09 2e-09
		2e-09 <b>G</b>
<u>gi 48094754 ref XP_392182.1 </u> similar to ENSANGP00000020172 gi 1245146 gb AAB01099.1  HAT A1	<u>63</u> 63	2e-09
gi 51979535 ref XP 507560.1  PREDICTED P0007D08.15 gene pro	63	2e-09 <b>G</b>
qi:28829334 gb:AAO51876.1; similar to Dictyostelium discoid	63	2e-09
<u>qi 31210237 ref XP_314085.1 </u> ENSANGP0000003691 [Anopheles	62	3e-09 <b>G</b>
gi 34911780 ref NP 917237.1  OJ1316_H05.17 [Oryza sativa (j	<u>62</u>	3e-09 <b>G</b>
gi 9910238 ref NP 064388.1  general control of amino acid s	62	3e-09 <b>G</b>
gi 55240574 qb EAA09379.3  ENSANGP0000003691 [Anopheles ga	<u>62</u>	3e-09
<u>gi 55296880 dbi BAD68333.1 </u> PSTVd RNA-biding protein-like [ <u>gi 29248585 gb EAA40115.1 </u> GLP 80 20751 21473 [Giardia lamb	62 62	3e-09 3e-09
qi 14165484 qb AAH08039.1  BRD8 protein [Homo sapiens] >gi	62	5e-09 <b>G</b>
gi 34452709 ref NP 899203.1  bromodomain containing 8 isofo	62	5e-09 <b>G</b>
gi 21536234 ref NP 084423.1  bromodomain containing 8 [Mus	62	5e-09 <b>G</b>
gi 34452707 ref NP 631938.1  bromodomain containing 8 isofo	62	5e-09 <b>G</b>
gi 2135974 pir  S68142 probable transcription factor SMAP	62	5e-09 <b>G</b>
gi 42554923 gb EAA77766.1  hypothetical protein FG09717.1 [	62	5e-09 <b>G</b>
qi 57093561 ref XP 531918.1  PREDICTED: similar to bromodom	62	5e-09
<u>qi 56606080 ref NP 001008509.1 </u> bromodomain containing 8 [R	62	5e-09
<pre>gi 34452705 ref NP 006687.3  bromodomain containing 8 isofo</pre>	<u>62</u>	5e-09 <b>G</b>
gi 18606031 qb AAH23160.1  Brd8 protein [Mus musculus]	<u>62</u>	5e-09 <b>G</b>
gi 55732238 emb CAH92823.1  hypothetical protein [Pongo pyg	62	5e-09 5e-09
gi 2707336 gb AAB92257.1  histone acetyltransferase [Arabid	62	5e-09 <b>G</b>
<pre>qi 2655006 gb AAB87858.1  thyroid hormone receptor coactiva qi 57525007 ref NP 001006148.1  similar to bromodomain cont</pre>	<u>62</u> 61.	7e-09
gi 34854705 ref XP 229225.2  similar to KIAA1476 protein [R	61	7e-09 <b>G</b>
gi 50754923 ref XP 414542.1  PREDICTED: similar to bromodom	61	7e-09 <b>G</b>
gi 53136534 emb CAG32596.1  hypothetical protein [Gallus ga	61	7e-09 <b>G</b>
gi 26328143 dbj BAC27812.1  unnamed protein product [Mus mu	61	7e-09 <b>G</b>
qi 57222786 gb AAW40830.1  transcriptional activator gcn5,	61	9e-09
qi 50261018 gb EAL23668.1  hypothetical protein CNBA3150 [C	<u>61</u>	9e-09
<pre>qi 54635725 gb EAL25128.1  GA10623-PA [Drosophila pseudoobs gi 57097415 ref XP 532754.1  PREDICTED: similar to transcri</pre>	61 60	9e-09 1e-08
qi 55238947 gb EAL40012.1  ENSANGP00000029642 [Anopheles ga	60	1e-08
gi 19074752 ref NF 586258.1  TRANSCRIPTIONAL ACTIVATOR [Enc	60	2e-08 <b>G</b>
<u>gi 27503567 qb AAH42646.1 </u> BC053917 protein [Mus musculus]	60	2e-08 <b>G</b>
gi 46433516 qb EAK92953.1  potential chromatin-associated p	60	2e-08
<pre>qi 56472259 qb EAL49757.1  bromodomain protein, putative [E qi 56468123 qb EAL46008.1  bromodomain protein, putative [E</pre>	<u>60</u> 60	2e-08 2e-08
qi:15778343 gb:AAL07393.1; CECR2B [Homo sapiens]	60	2e-08 G

gi 56518510 emb CAH76159.1 histone acetyltransferase Gcn5,gi 56499474 emb CAH95151.1 histone acetyltransferase Gcn5,gi 24370476 emb CAC70157.1 polybromodomain protein [Brugiagi 23491055 gb EAA22686.1 polybromodomain protein [Brugiagi 23490365 gb EAA22160.1 similar to S. cerevisiae BDF1 [Pgi 38503467 gb AAR22527.1 histone acetyltransferase GCN5-rhistone acetyltransferase GCN5-r	59 59 59 59 59 59	3e-08 3e-08 3e-08 3e-08 3e-08 3e-08
gi 23612782 ref NP 704321.1  histone acetyltransferase Gcn5	<u>59</u>	4e-08 <b>G</b>
<pre>gi 7304923 ref NP 038478.1  bromodomain adjacent to zinc fi gi 46098556 gb EAK83789.1  hypothetical protein UM02619.1 [</pre>	<u>59</u> <u>59</u>	4e-08 <b>G</b> 4e-08
<pre>gi 45382753 ref NP 990008.1  extracellular matrix protein F</pre>	<u>59</u>	4e-08 <b>G</b>
<pre>qi 29421196 dbj BAA96000.2  KIAA1476 protein [Homo sapiens] qi 47220585 emb CAG05611.1  unnamed protein product [Tetrao qi 39598267 emb CAE68959.1  Hypothetical protein CBG14939 [</pre>	59 59 59	4e-08 <b>G</b> 4e-08 4e-08
gi 5262644 emb CAB45759.1  hypothetical protein [Homo sapie	<u>59</u>	4e-08 <b>G</b>
<pre>gi 22653668 sp Q9UIF8 BA2B HUMAN Bromodomain adjacent to zi gi 55612288 ref XP 525949.1  PREDICTED: bromodomain adjacen</pre>	<u>59</u> <u>59</u>	4e-08 <b>G</b> 5e-08
<pre>qi;23508131 ref[NP 700801.1  hypothetical protein PF10 0328</pre>	58	6e-08 <b>G</b>
<pre>gi 56472529 gb EAL50010.1  bromodomain protein, putative [E</pre>	58	6e-08
<u>qi 46226948 gb EAK87914.1 </u> chromodomain-helicase-DNA-bindin <u>gi 54657614 gb EAL36361.1 </u> RIKEN cDNA A730019I05 gene [Cryp	<u>58</u>	6e-08 6e-08
gi 54657612 gb EAL36360.1  hypothetical protein Chro.20286	<u>58</u> 58	8e-08
gi 45551085 ref NP_725062.2  CG10897-PB, isoform B [Drosoph	57	1e-07 <b>G</b>
gi 24652776 ref NP 725061.1  CG10897-PD, isoform D [Drosoph	57	1e-07 <b>G</b>
gi 24652774 ref NP 725060.1  CG10897-PC, isoform C [Drosoph	57	1e-07 <b>G</b>
gi 22023997 ref NP 523701.2  CG10897-PA, isoform A [Drosoph	57	1e-07 <b>G</b>
<pre>gi 12642598 gb AAK00302.1  Toutatis [Drosophila melanogaster]</pre>	57	1e-07
<u>gi 56501185 emb CAH98647.1 </u> hypothetical protein PB001232.0	<u>57</u>	1e-07
gi 26326149 dbj BAC26818.1  unnamed protein product [Mus mu gi 57228880 qb AAW45314.1  conserved hypothetical protein [	57	1e-07 <b>G</b> 1e-07
gi 57087477 ref XP 536845.1  PREDICTED: similar to bromodom	<u>57</u> <u>57</u>	1e-07
gi 50256505 gb EAL19230.1  hypothetical protein CNBH3290 [C	57	1e-07
<u>qi 47086497 ref NP 997942.1 </u> Unknown (protein for MGC:66249 <u>qi 56474427 gb EAL51797.1 </u> bromodomain protein, putative [E	<u>57</u> 57	1e-07 <b>G</b> 1e-07
<pre>gi 28277586 gb AAH44181.1  Brd8 protein [Danio rerio]</pre>	<u> 57</u>	1e-07 <b>G</b>
gi 19113148 ref NP 596356.1  putative transcriptional activ	57	2e-07 <b>G</b>
<pre>gi 50749002 ref XP_426440.1  PREDICTED: similar to bromodom</pre>	_57	2e-07 <b>G</b>
<pre>qi 47211530 emb CAF90136.1  unnamed protein product [Tetrao</pre>	<u>57</u>	2e-07
<pre>qi 20357588 ref NP 620278.1  TBP-associated factor 1 isofor</pre>	<u>56</u>	2e-07 <b>G</b>
<pre>qi 34865213 ref XP_234156.2  similar to chromatin remodelin</pre>	<u>56</u>	2e-07 <b>G</b>
<pre>gi 20357585 ref NP 004597.2  TBP-associated factor 1 isofor</pre>	<u> 56</u>	2e-07 <b>G</b>
gii34481757 emb CAD70493.2  putative DYT3 protein [Homo sap	<u>56</u>	2e-07 <b>G</b>
<pre>gi 34481755 emb CAD70492.2  putative DYT3 protein [Homo sap</pre>	<u>56</u>	2e-07 <b>G</b>
<pre>gi   34481753   emb   CAD70491.2   putative DYT3 protein [Homo sap</pre>	<u>56</u>	2e-07 <b>G</b>
qi 34481733 emb CAD87527.1  putative DYT3 protein [Homo sap	<u>56</u>	2e-07 <b>G</b>
<u>qi 47214801 emb CAF89628.1 </u> unnamed protein product [Tetrao <u>qi 47206036 emb CAF91716.1 </u> unnamed protein product [Tetrao	<u>56</u> 56	2e-07 2e-07
gi 47205952 emb CAF90865.1  unnamed protein product [Tetrao	<u> 56</u>	2e-07
qi 39582716 emb CAE65922.1  Hypothetical protein CBG11090 [	56	2e-07
<pre>gi 8569258 pdb 1EQF A Chain A, Crystal Structure Of The Dou</pre>	56	2e-07
<pre>qi 14670392 ref NP 115784.1  bromodomain adjacent to zinc f</pre>	<u>56</u>	3e-07 <b>G</b>

<u>gi 17510001 ref NP 491173.1 </u> histone acetyltransferase (88 <u>gi 57112471 ref XP 549070.1 </u> PREDICTED: similar to TBP-asso	<u>56</u> <u>56</u>	3e-07 <b>G</b> 3e-07
<u>qi;3/1124/1][EI]XP 308254.1 </u> ENSANGP00000010809 [Anopheles	56	3e-07 G
qi 6683496 dbi BAA89210.1  bromodomain adjacent to zinc fin	56	3e-07 <b>G</b>
<u>gi 33589500 gb AAQ22517.1 </u> LD26355p [Drosophila melanogaster]	56	3e-07
<u>gi 24649782 ref NP_651288.1 </u> CG11375-PA [Drosophila melanog	56	3e-07 <b>G</b>
<pre>gi 55639437 ref XP 509537.1  PREDICTED: similar to KIAA0314 gi 55628708 ref XP 527780.1  PREDICTED: hypothetical protei</pre>	<u>56</u> 56	3e-07 3e-07
<u>gi 55245294 gb EAL41745.1 </u> ENSANGP00000028929 [Anopheles ga	56	3e-07
gi 55245293 gb EAA03942.2  ENSANGP00000010809 [Anopheles ga	<u> 56</u>	3e-07
<u>qi 48103752 ref XP_395639.1 </u> similar to ENSANGP00000003310	56	3e-07 <b>G</b>
<pre>gi 4165087 gb AAD08675.1  Williams-Beuren syndrome deletion gi 47223904 emb CAG06081.1  unnamed protein product [Tetrao</pre>	<u>56</u> <u>56</u>	3e-07 <b>G</b> 3e-07
gi 32967603 ref NP 038476.2  bromodomain adjacent to zinc f	55	4e-07 <b>G</b>
<pre>gi 26338768 dbj BAC33055.1  unnamed protein product [Mus mu</pre>	. <u>55</u>	4e-07 <b>G</b>
<pre>qi 34881239 ref XP 228551.2  similar to CCG1 [Rattus norveg qi 57090081 ref XP 537409.1  PREDICTED: similar to bromodom</pre>	<u>55</u> 55	4e-07 <b>G</b> 4e-07
<pre>gi 6683494 dbj BAA89209.1  bromodomain adjacent to zinc fin</pre>	<u> 55</u>	4e-07 <b>G</b>
gi 24659555 ref NP 729188.1  CG32394-PA [Drosophila melanog	55	4e-07 <b>G</b>
gi 32967605 ref NP 872589.1  bromodomain adjacent to zinc f	<u>55</u>	4e-07 <b>G</b>
gi 28958186 gb AAH47418.1  B430306D02Rik protein [Mus muscu	<u>55</u>	4e-07 <b>G</b>
<u>gi 51772243 ref XP 194622.4 </u> similar to CCG1 [Mus.musculus]	<u>55</u>	4e-07 <b>G</b>
<u>gi 51767276 ref XP 484142.1 </u> hypothetical protein B930060C0	<u>55</u>	4e-07 <b>G</b>
gi 4884108 emb CAB43261.1  hypothetical protein [Homo sapie	<u> 55</u>	4e-07 <b>G</b>
gi 40787763 gb AAH65123.1  BC065123 protein [Mus musculus]	<u>55</u>	4e-07 <b>G</b>
gi 22653665 sp Q9NRL2 BA1A_HUMAN_Bromodomain_adjacent_to_zi	<u>55</u>	4e-07 <b>G</b>
gi 26338285 dbj BAC32828.1  unnamed protein product [Mus mu	<u>55</u>	4e-07 <b>G</b> 5e-07 <b>G</b>
gi 19075972 ref NP 588472.1  putative transcriptional regul	<u>55</u>	5e-07 <b>G</b> 5e-07 <b>G</b>
gi 42549961 qb EAA72804.1  hypothetical protein FG04423.1 [ gi 24020884 qb AAN40840.1  TBP-associated factor RNA polyme	<u> 55</u>	5e-07 <b>G</b>
gi 24020884 qb AAN40840.1  TBP-associated factor RNA polyme gi 50760409 ref XP 418009.1  PREDICTED: similar to Transcri	<u>55</u> 55	5e-07 <b>G</b>
<u>gi 50745680 ref XP 420198.1 </u> PREDICTED: similar to CCG1 [Ga	55	5e-07 <b>G</b>
qi 42558222 dbj BAD11104.1  SNF2-family ATP dependent chrom	<u>55</u>	5e-07
di 47209254 emb CAF91993.1  unnamed protein product [Tetrao	55	5e-07
gi 56202868 emb CAI21897.1  tripartite motif-containing 33	<u>55</u>	7e-07
<u>gi 20129741 ref NP 610266.1 </u> CG1845-PA [Drosophila melanoga gi 34876969 ref XP 240329.2  similar to polybromo-1D [Rattu	<u>55</u>	7e-07 <b>G</b> 7e-07 <b>G</b>
gi 34876969 ref XP 240329.2  similar to polybromo-1D [Rattu gi 57098727 ref XP 533013.1  PREDICTED: similar to Transcri	<u>55</u> 55	7e-07
gi 30721853 qb AAP34197.1  polybromo-1D [Homo sapiens]	_ <u>55</u>	7e-07 <b>G</b>
qi 14971411 ref NP 148980.1  tripartite motif-containing 33	5.5	7e-07 <b>G</b>
<u>gi:12083896 gb:AAG48941.1:</u> polybromo-1 [Homo sapiens] >gi 4	<u> 55</u>	7e-07 <b>G</b>
<u>gi 12083894 gb AAG48940.1 </u> polybromo-1 [Homo sapiens] >gi 4	<u> 55</u>	7e-07 <b>G</b>
gi:12083892 qb:AAG48939.1: polybromo-1 [Homo sapiens] >gi 3	<u>55</u>	7e-07 <b>G</b>
<u>gi 12083875 qb AAG48933.1 </u> polybromo-1 [Homo sapiens] <u>gi 54635374 qb EAL24777.1 </u> GA14940-PA [Drosophila pseudoobs	<u>55</u> <u>55</u>	7e-07 <b>G</b> 7e-07
<u>qi 51768295 ref XP 484357.1 </u> RIKEN 2310032M22 [Mus musculus]	<u>55</u>	7e-07 <b>G</b>
<u>qi 46097809 qb EAK83042.1 </u> hypothetical protein UM05168.1 [	<u>55</u>	7e-07
<u>qi 30794368 ref NP 060783.2 </u> polybromo 1 [Homo sapiens] >gi	<u>55</u>	7e-07 <b>G</b> 7e-07 <b>G</b>
<pre>gi 16551971 dbi BAB71210.1  unnamed protein product [Homo s</pre>	<u>55</u>	/e-U/

<pre>gi 4325109 gb AAD17259.1  transcriptional intermediary fact gi 27803071 emb CAD60774.1  unnamed protein product [Podosp</pre>	<u>55</u> 55	7e-07 <b>G</b> 7e-07
gi 26326785 dbi BAC27136.l  unnamed protein product [Mus mu	55	7e-07 <b>G</b>
qi 26365296 dbj BAB26374.2  unnamed protein product [Mus mu	_55	7e-07 <b>G</b>
qi 6755993 ref NP 035844.1  bromodomain adjacent to zinc fi	54	9e-07 <b>G</b>
gi 50417257 qb AAH78299.1  Zgc:100857 protein [Danio rerio]	54	9e-07 <b>G</b>
qi 26332264 dbi BAC29862.1  unnamed protein product [Mus mu	54	9e-07 <b>G</b>
gi 56202867 emb CAT21896.1  tripartite motif-containing 33	54	1e-06
<pre>gi 32421217 ref XP_331052.1  hypothetical protein [Neurospo</pre>	54	1e-06 <b>G</b>
<pre>gi 55620429 ref XP 516515.1  PREDICTED: similar to polybrom gi 55587792 ref XP 513668.1  PREDICTED: tripartite motif-co</pre>	<u>54</u> 54	1e-06 1e-06
gi 14971413 ref NP 056990.2  tripartite motif-containing 33	54	1e-06 <b>G</b>
gi 56202866 emb CAI21895.1  tripartite motif-containing 33	54	1e-06
gi 5834582 emb CAB55313.1  rfg7 protein [Homo sapiens]	54	1e-06 <b>G</b>
<u>qi 5689563 dbj BAA83065.1 </u> KIAA1113 protein [Homo sapiens]	54	1e-06 <b>G</b>
<u>gi 45384026 ref NP 990496.1 </u> polybromo 1 protein [Gallus ga	54	1e-06 <b>G</b>
<u>gi 38197516 gb AAH08965.2 </u> BAZ2A protein [Homo sapiens]	<u>54</u>	1e-06 <b>G</b>
gi 57092555 ref NP 538237.1  PREDICTED: similar to hypothet gi 37194693 qb AAH58241.1  Unknown (protein for IMAGE:63083	<u>54</u> <u>54</u>	1e-06 1e-06
gi 7304921 ref NP 038477.1  bromodomain adjacent to zinc fi	54	1e-06 <b>G</b>
gi 14670390 ref NP 075381.2  bromodomain adjacent to zinc f	54	1e-06 <b>G</b>
gi 54643598 gb AAH84946.1  Unknown (protein for IMAGE:49603	54	1e-06 <u> </u>
<pre>gi 33469025 ref NP 473419.1  bromodomain adjacent to zinc f</pre>	54	1e-06 <b>G</b>
<u>gi 37360250 dbj BAC98103.1 </u> mKIAA1113 protein [Mus musculus]	<u>54</u>	1e-06 <b>G</b>
gi 46229766 gb EAK90584.1  protein with 2 bromo domains [Cr gi 54657810 gb EAL36527.1  hypothetical protein Chro.70137	<u>54</u> <u>54</u>	1e-06 1e-06
gi 51476484 emb CAH18232.1  hypothetical protein [Homo sapi	54	1e-06
gi 28972143 dbj BAC65525.1  mKIAA0314 protein [Mus musculus]	54	1e-06 <b>G</b>
gi 4049922 gb AAC97879.1  transcription factor WSTF [Homo s	54	1e-06 <b>G</b>
gi 56490889 emb CAI05770.1  hypothetical protein PB301534.0	54	1e-06
gi 22653669 sp Q9UIF9 EA2A_HUMAN Bromodomain adjacent to zi	<u>54</u>	1e-06 <b>G</b>
gi 2224569 dbi BAA20773.1  KIAA0314 [Homo sapiens]	54	1e-06 <b>G</b> 2e-06
<u>gi 474971 dbj BAA05110.1 </u> CCG1 [Mesocricetus auratus] >gi 2 <u>gi 34867725 ref XP 221627.2 </u> similar to WDR9 protein, form	<u>53</u> _53	2e-06 <b>G</b>
gi 34862191 ref   XP 222315.2   similar to TTF-I interacting p	<u> 53</u>	2e-06 <b>G</b>
qi 57108950 ref XP 544889.1  PREDICTED: similar to WD-repea	53	2e-06
gi 55643327 ref XP 523285.1  PREDICTED: similar to CREB-bin	53	2e-06
gi 37360534 dbi BAC98245.1  mKIAA1740 protein [Mus musculus] gi 57229792 gb AAW46194.1  nucleus protein, putative [Crypt	<u>53</u> 53	2e-06 <b>G</b> 3e-06
gi 23508824 ref NP 701492.1  bromodomain protein, putative	53	3e-06 <b>G</b>
gi 45433503 ref NP 444400.1  tripartite motif protein 33 [M	53	3e-06 <b>G</b>
qi 50255361 gb EAL18096.1  hypothetical protein CNBK1170 [C	53	3e-06
<u>qi 54637438 gb EAL26840.1 </u> GA10956-PA [Drosophila pseudoobs	53	3e-06
<pre>gi 51770163 ref XP 196171.4  bromodomain and PHD finger con gi 55962792 emb CAI11773.1  novel protein [Danio rerio]</pre>	_ <u>53</u> _ <u>53</u>	3e-06 <b>©</b> 3e-06
gi 37360308 dbi BAC98132.1  mKIAA1286 protein [Mus musculus]	53	3e-06 <b>G</b>
gi 56518079 emb CAH79038.1  bromodomain protein, putative [	53	3e-06
<pre>gi 56515560 emb CAH84003.1  hypothetical protein PC300805.0 gi 23480253 gb EAA16864.1  ERYTHROCYTE MEMBRANE PROTEIN PFE</pre>	<u>53</u> 53	3e-06 3e-06
WALLESTON OF THE PROPERTY OF T		

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Get selected sequences
                             Select all
                                        Deselect all
                                G bromodomain containing 2 [Homo sapiens]
>qi|15706263|emb|CAC69989.1|
          Length = 801
Score = 217 \text{ bits } (553), \text{ Expect} = 6e-56
Identities = 101/101 (100%), Positives = 101/101 (100%)
Query: 1
          YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
          YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 81 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 140
Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101
           CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP
Sbjct: 141 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 181
Score = 100 bits (248), Expect = 1e-20
Identities = 46/87 (52%), Positives = 58/87 (66%)
Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
           +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E
Sbjct: 368 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 427
Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101
           YN P D+V MA+ L+ +F + A MP
Sbjct: 428 YNPPDHDVVAMARKLQDVFEFRYAKMP 454
                                G bromodomain containing protein 2 [Homo sapiens]
>gi|4826806|ref|NP 005095.1|
gi|56207529|emb|CAI18689.1|
                              bromodomain containing 2 [Homo sapiens]
                              bromodomain containing 2 [Homo sapiens]
gi|56206429|emb|CAI18548.1|
gi|55961972|emb|CAI18110.1|
                              bromodomain containing 2 [Homo sapiens]
gi|55961413|emb|CAI17492.1|
                              bromodomain containing 2 [Homo sapiens]
hypothetical protein [Homo sapiens]
 gi|52545950|emb|CAH56171.1|
qi|577293|dbj|BAA07641.1|
                           G KIAA9001 [Homo sapiens]
                                  Bromodomain-containing protein 2 (RING3 protei
qi|12230989|sp|P25440|BRD2 HUMAN
         Length = 801
Score = 217 \text{ bits } (553), \text{ Expect} = 6e-56
Identities = 101/101 (100%), Positives = 101/101 (100%)
Query: 1
          YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
          YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 81 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 140
Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101
          CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP
Sbjct: 141 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 181
```

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Score = 100 \text{ bits } (248), \text{ Expect = } 1e-20
 Identities = 46/87 (52%), Positives = 58/87 (66%)
Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
          +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY
Sbjct: 368 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 427
Ouery: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101
          YN P D+V MA+ L+ +F + A MP
Sbjct: 428 YNPPDHDVVAMARKLQDVFEFRYAKMP 454
🗔 >qi|1082363|pir||A56619 female sterile homeotic (fsh) homolog RING3 - human
 qi|182769|qb|AAA68890.1|
                         © putative
         Length = 754
 Score = 217 \text{ bits } (553), \text{ Expect = } 6e-56
 Identities = 101/101 (100%), Positives = 101/101 (100%)
Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
          YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 93
Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101
          CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP
Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 134
 Score = 100 bits (248), Expect = 1e-20
 Identities = 46/87 (52%), Positives = 58/87 (66%)
Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
          +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E
                                                      D
Sbjct: 321 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 380
Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101
          YN P D+V MA+ L+ +F + A MP
Sbjct: 381 YNPPDHDVVAMARKLQDVFEFRYAKMP 407
gi|2995270|emb|CAA15819.1| MMRING3.1.2 -[Mus musculus]
Length = 798
Score = 217 \text{ bits } (553), \text{ Expect} = 6e-56
Identities = 101/101 (100%), Positives = 101/101 (100%)
Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
          YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 80 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 139
Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101
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## CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 140 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 180 Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%) Ouery: 15 FAWPFROPVDAVKLGLPDYHKIIKOPMDMGTIKRRLENNYYWAASECMODFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY Sbjct: 367 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 426 Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 427 YNPPDHDVVAMARKLQDVFEFRYAKMP 453 🔲 >gi:|57094404|ref|XP 532103.1| PREDICTED: similar to Bromodomain-containing prote protein) (027.1.1) [Canis familiaris] Length = 800Score = 217 bits (553), Expect = 6e-56 Identities = 101/101 (100%), Positives = 101/101 (100%) Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE Sbjct: 99 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 158 Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 159 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 199 Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%) Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY Sbjct: 365 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 424 Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 425 YNPPDHDVVAMARKLQDVFEFRYAKMP 451 **G** bromodomain-containing 2 [Rattus norvegicus] **G** bromodomain-containing 2 [Rattus norvegicus] gi|46237556|emb|CAE83937.1| Length = 798Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%) Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE Sbjct: 80 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 139

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP

Sbjct: 140 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 180

Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY

Sbjct: 367 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 426

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 427 YNPPDHDVVAMARKLQDVFEFRYAKMP 453

Score = 217 bits (553), Expect = 6e-56 Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE

Sbjct: 80 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 139

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 140 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 180

Score = 100 bits (248), Expect = 1e-20Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
+AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY
Sbjct: 367 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 426

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 427 YNPPDHDVVAMARKLQDVFEFRYAKMP 453

>gi|55956582|emb|CAT11405.1| bromodomain-containing protein 2 [Canis familiaris]
Length = 803

Score = 217 bits (553), Expect = 6e-56 Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE Sbjct: 81 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 140 Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP

Sbjct: 141 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 181

Score = 100 bits (248), Expect = 1e-20Identities = 46/87 (528), Positives = 58/87 (668)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY

Sbjct: 368 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 427

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 428 YNPPDHDVVAMARKLQDVFEFRYAKMP 454

| > gi | 55725298 | emb | CAH89514.1| hypothetical protein [Pongo pygmaeus] Length = 546

Score = 217 bits (553), Expect = 6e-56 Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE

Sbjct: 81 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 140

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 141 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 181

Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
+AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY
Sbjct: 368 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 427

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 428 YNPPDHDVVAMARKLQDVFEFRYAKMP 454

|| > gi | | 52545923 | emb | | CAH56179.1 | hypothetical protein [Homo sapiens] Length = 754

Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 93

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101

CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP
Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 134

Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
+AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY

Sbjct: 321 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 380

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 381 YNPPDHDVVAMARKLQDVFEFRYAKMP 407

Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 80 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 139

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 140 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 180

Score = 100 bits (248), Expect = 1e-20Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY Sbjct: 367 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 426

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 427 YNPPDHDVVAMARKLQDVFEFRYAKMP 453

Score = 217 bits (553), Expect = 6e-56 Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 93

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP

### Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 134

Score = 100 bits (248), Expect = 1e-20Identities = 46/87 (52%), Positives = 58/87 (66%) Ouery: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E Sbjct: 321 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 380 Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 381 YNPPDHDVVAMARKLQDVFEFRYAKMP 407 D>gi|2995269|emb|CAA15818.1| MMRING3.1.1 [Mus musculus] Length = 752Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%) Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60  $\verb|YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE|$ Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 93 Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 134 Score = 100 bits (248), Expect = 1e-20Identities = 46/87 (52%), Positives = 58/87 (66%) Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E Sbjct: 321 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 380 Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 381 YNPPDHDVVAMARKLQDVFEFRYAKMP 407 qi|2780777|dbi|BAA24378.1| G Ring3 [Mus musculus] Length = 503Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%)YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE

Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 93

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101

CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP

http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi

Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 134

Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY

Sbjct: 321 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 380

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 381 YNPPDHDVVAMARKLQDVFEFRYAKMP 407

| >gi|2780775|dbi|BAA24377.1| | G Ring3 [Mus musculus]
| Length = 549

Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 80 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 139

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP

Sbjct: 140 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 180

Score = 100 bits (248), Expect = 1e-20 Identities = 46/87 (52%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY Sbjct: 367 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 426

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F + A MP Sbjct: 427 YNPPDHDVVAMARKLQDVFEFRYAKMP 453

Score = 217 bits (553), Expect = 6e-56Identities = 101/101 (100%), Positives = 101/101 (100%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 81 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 140

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP Sbjct: 141 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 181

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Score = 100 bits (248), Expect = 1e-20
Identities = 46/87 (52%), Positives = 58/87 (66%)
Ouery: 15 FAWPFROPVDAVKLGLPDYHKIIKOPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74
           +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D
Sbjct: 368 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 427
Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101
           YN P D+V MA+ L+ +F + A MP
Sbjct: 428 YNPPDHDVVAMARKLQDVFEFRYAKMP 454
D>gi|1588281|prf||2208296A
                            RING3 protein
          Length = 509
 Score = 217 \text{ bits } (553), \text{ Expect = } 6e-56
 Identities = 101/101 (100%), Positives = 101/101 (100%)
Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60
           YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE
Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 93
Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101
           CMODENTMETNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP
Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 134
 Score = 100 bits (248), Expect = 1e-20
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Identities = 46/87 (52%), Positives = 58/87 (66%)
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Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH IIK PMD+ T+KR++EN Y A E D MF+NCY Sbjct: 203 YAWPFYKPVDASALGLHDYHDIIKHPMDLSTVKRKMENRDYRDAQEFAADVRLMFSNCYK 262 Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101

YN P D+V MA+ L+ +F + A MP Sbjct: 263 YNPPDHDVVAMARKLQDVFEFRYAKMP 289

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\square >qi|1370092|emb|CAA65449.1| kinase [Gallus gallus]
          Length = 729
```

Score = 213 bits (542), Expect = 1e-54 Identities = 98/101 (97%), Positives = 99/101 (98%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYW A+E Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWGAAE 93

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVA MP Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVAQMP 134 Score = 100 bits (250), Expect = 8e-21Identities = 47/87 (54%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH+IIK PMD+ TIKR++EN Y A E D MF+NCY Sbjct: 315 YAWPFYKPVDASALGLHDYHEIIKHPMDLSTIKRKMENRDYHDAQEFAADVRLMFSNCYK 374

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F A MP Sbjct: 375 YNPPDHDVVAMARKLQDVFEFSYAKMP 401

 $\begin{array}{lll} \hline > \underline{\text{gi} \mid 3129967 \mid \text{emb} \mid \text{CAA18965.1} \mid} & \text{RING3 kinase [synthetic construct]} \\ \underline{\text{gi} \mid 7512236 \mid \text{pir} \mid \mid \text{T28145} \mid} & \text{RING3 kinase - chicken} \\ \hline & \text{Length} = 733 \\ \hline \end{array}$ 

Score = 213 bits (542), Expect = 1e-54 Identities = 98/101 (97%), Positives = 99/101 (98%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYW A+E Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWGAAE 93

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVA MP Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVAQMP 134

Score = 100 bits (250), Expect = 8e-21 Identities = 47/87 (54%), Positives = 58/87 (66%)

Query: 15 FAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASECMQDFNTMFTNCYI 74 +AWPF +PVDA LGL DYH+IIK PMD+ TIKR++EN Y A E D MF+NCY Sbjct: 319 YAWPFYKPVDASALGLHDYHEIIKHPMDLSTIKRKMENRDYHDAQEFAADVRLMFSNCYK 378

Query: 75 YNKPTDDIVLMAQTLEKIFLQKVASMP 101 YN P D+V MA+ L+ +F A MP Sbjct: 379 YNPPDHDVVAMARKLQDVFEFSYAKMP 405

| Serine threonine Kinase [Coturnix japonica] | Length = 735

Score = 213 bits (542), Expect = 1e-54Identities = 98/101 (97%), Positives = 99/101 (98%)

Query: 1 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWAASE 60 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYW A+E Sbjct: 34 YLHKVVMKALWKHQFAWPFRQPVDAVKLGLPDYHKIIKQPMDMGTIKRRLENNYYWGAAE 93

Query: 61 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVASMP 101 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVA MP Sbjct: 94 CMQDFNTMFTNCYIYNKPTDDIVLMAQTLEKIFLQKVAQMP 134